

Claims

[c1] What is claimed is:

1. A weighing apparatus comprising:

a plurality of load cells used to measure drag force;
a plurality of loads cell used to measure chain force; and
combining the output of said load cells to determine
weight

2. A weighing apparatus according to claim 1 wherein a
processing unit is used to combine said output.

[c2] 3.A weighing apparatus according to claim 1 wherein the
device is used in a fork lift.

[c3] 4.A weighing apparatus according to claim 1 wherein
said load cells that are used to measure drag.

[c4] 5.A weighing apparatus according to claim 1 wherein
said load cell used to measure chain force is connected
to a lifting chain and a lifting platform.

[c5] 6. A weighing apparatus according to claim 1 wherein
said loads cell that are used to measure drag between
the live frame and a dead frame.

[c6] 7.A weighing apparatus according to claim 1 wherein

said load cells are connected to a processing unit through the use of connecting means.

- [c7] 8.A weighing apparatus according to claim 1 wherein said load cells are connected to a processing unit through the use of an RF connecting means.
- [c8] 9.A weighing apparatus according to claim 1 wherein said load cells are connected to a processing unit through the use of an RF connecting means with said load cells connected to an RF transmitter and said processing unit connected to an RF receiver with said RF transmitter transmitting to said RF receiver.
- [c9] 10.A weighing apparatus according to claim 1 which includes an overload protection means.
- [c10] 11. A method to measure weight comprising the step of :
using a plurality of load cells used to measure drag force;
using a plurality of loads cell used to measure chain force; and
combining the output of said load cells to determine a weight
12. A method according to claim 11 wherein a processing unit is used to combine said output.
- [c11] 13.A method according to claim 11 wherein the method

is used in a fork lift.

- [c12] 14.A method according to claim 11 wherein said load cell used to measure drag is attached to a flexural element.
- [c13] 15.A method according to claim 11 wherein said load cell used to measure chain force is attached to a lifting chain and a lifting platform.
- [c14] 16. A method according to claim 11 wherein said load cell used to measure drag is attached a live frame and a dead frame.
- [c15] 17.A method according to claim 11 the steps of connecting a processing unit through the use of connecting means.
- [c16] 18.A method according to claim 11 including the steps of connecting said load cells to a processing unit through the use of an RF connecting means.
- [c17] 19.A method according to claim 11 including the steps of connecting said load cells to a processing unit through the use of an RF connecting means with said load cells connected to an RF transmitter and said processing unit connected to an RF receiver with said RF transmitter transmitting to said RF receiver.

[c18] 20.A method according to claim 12 wherein having an overload protection means.